

CLAIMS

Sub A 1. A packet configured to transmit information via a network, the packet comprising one or more labels configured to control routing of the packet and a payload.

Sub B 2. The packet according to claim 1, wherein said network comprises a fiber optic network.

3. The packet according to claim 1, wherein said network comprises a SONET/SDH fiber optic network.

Sub A 4. The packet according to claim 1, wherein said frame comprises protocol-independent data.

5. The packet according to claim 1, wherein said one or more labels comprise MPLS labels.

6. The packet according to claim 5, wherein each of said one or more MPLS labels comprise 32-bit words.

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7. The packet according to claim 1, comprising a packet identifier configured to store configuration information to identify said data type, wherein said packet contains a specific protocol identifier, separate from a general protocol identifier, for all of the number of different packets of data types.

8. The packet according to claim 1, further comprising a link layer address configured to control a node to node transfer.

9. The packet according to claim 8, wherein said link layer address comprises a destination address and a source address.

10. The packet according to claim 1, further comprising a data identification portion configured to identify a data type.

11. The packet according to claim 1, further comprising a payload configured to store data.

12. The packet according to claim 1, further comprising an error portion configured to determine a data error.

13. The packet according to claim 1, wherein said network comprises a plurality of nodes configured to address said one or more labels.

14. The packet according to claim 13, wherein each of said nodes comprise de-framing hardware for said one or more labels.

15. The packet according to claim 14, wherein each of said plurality of nodes is configured to transport said frame in response to said one or more labels.

16. An apparatus comprising:
one or more nodes configured to transfer one or more packets, each comprising one or more labels configured to control switching of the one or more packets and a payload, wherein each node is configured to transmit and/or receive said one or more packets in response to said one or more labels.

17. A method for transmitting one or more packets of data comprising the steps of:

(A) transmitting and/or receiving said frame comprising one or more packets, each comprising one or more labels and a
5 payload; and

(B) controlling switching of said one or more packets of said frame in response to one or more labels.

18. The method according to claim 17, further comprising the step of:

(C) transmitting and/or receiving said payload in response to said one or more labels.